

Governor's STEM Advisory Council Executive Committee meeting #10 Wednesday, September 19, 2012 9:00 am – 11:00 am

PRESENT:

Executive Committee Member Present on Site —

Lt. Governor Kim Reynolds, Co-Chair UNI President Benjamin Allen, Co-Chair Debi Durham Jason Glass Michelle Gowdy (proxy for Paul Schickler III) Brad Woody Jeff Weld, ex officio

Executive Committee Members Present via Phone or Video Conference —

John Carver Raynard Kington Sally Mason Teresa Wahlert Gail Wortmann

Staff and Guests on site and remote(r) —

Jeneane Beck

Carmine Boal

Jane Bradley

Brenda Buzynski

Lynne Campbell

David Drake (r)

Linda Fandel

Kari Jastorff (r)

Kris Kilibarda

Beth Kulow

Tonja Richards (r)

Rick Seeley (r)

Kari Webb

Rebecca Whitaker (r)

AGENDA:

Opening Remarks and Welcome.

Co-chairs Lt. Governor Reynolds and President Allen welcomed members and guests, expressing their appreciation to all for making time to attend and contribute to lowa's STEM initiative. The Lt. Governor commented on the great receptions at STEM Community Conversations, with much feedback being gathered. Executive Director Weld shared recent inquiries from leaders of emergent STEM initiatives including Wisconsin, Oregon, Maine, and the national organization STEM Connector that will recognize Lt. Governor Reynolds as one of 100 Women Leaders in STEM, in Washington D.C. on Oct. 2 (http://stemconnector.org/100women)

Item 1: Regional STEM Network Update

The Council's creation, a statewide STEM network, presciently designed by the committee headed by DMACC President Rob Denson, is now fully operational. Five Regional Managers provided summary of activities and entertained feedback.

- a. Regional Advisory Boards, Kari Webb, NW Regional Manager. Kari informed the Committee that all six boards have been seated and convened. She highlighted that wide diversity of representation comprises the NW and all regional boards. Appointees, collectively numbering 90, bring great passion to our mission, each charged with being a "voice for STEM" in the region. STEM is their lever, as Kari quoted Archimedes, "Give me a lever long enough and a fulcrum on which to place it, and I shall move the world."
- b. Board duties and role, Lynne Campbell, NC Regional Manager. Lynne's board ambitiously seeks more responsibility to transform STEM education in the region. They'll be dutifully leveraged in helping her to disseminate and realize the soon-to-be-released Next Generation Science Standards (NGSS). Attendees were provided the Framework for the NGSS and a sample component. All things NGSS are available at http://nextgenscience.org/
- c. Scale-Up of exemplary programs, Beth Kulow, SW Regional Manager. The Council's creation, the Scale-Up model, was insightfully designed by a committee chaired by Deb Dunkhase. Approximately 900 applications have poured in from local educators for scaling up 12 exemplary programs (899 actual count, though some are for multiple student groups). Even with considerable effort being devoted to maximizing value for each dollar, we may not be able to meet demand. FIRST Lego has 198 applicants, 137 for World In Motion, 119 for FIRST Tech Challenge, 96 for Curriculum in Ag. Science, 65 for KidWind, 63 for CSI's Engineering is Elementary, 55 for Partners in Engineering Education, 43 for Hyperstream, 42 for Fabulous Energy Education Resources, 18 for Health Occupations Exploration, and 17 for the State Science/Technology Fair. Managers are working closely with service providers to stretch dollars, combine workshops, share kits, etc. Even then, Scale-Up may fall \$1,000,000 short of meeting demand. By Oct. 15 will know for sure.

Subsets of regional boards will review and select applicants based on a common rubric prominently keyed to areas of lowa most in need.

Discussion main points arose: (1) Tally students impacted; (2) Ensure success by investing in those able; (3) Consider other investors including Foundations, Chambers, state and local

businesses, community groups such as Kiwanians [all of whom need this packaged in a quick, understandable way).

SC Manager Rebecca Whitaker augmented this segment with input on the investments of Rockwell Collins and John Deere in helping to grow the two FIRST programs. More such partners across Iowa are very much needed. Additionally, she detailed the preliminary steps of her selection panel in mapping locations of applications to assure geographic distribution.

- d. STEM Community Conversations, Kris Kilibarda, SC Manager. As co-chairs Lt. Governor Reynolds and President Allen make their way across lowa promoting STEM, spin off benefits to each stop accrue. At Drake, new connections were made, conversations across entities were begun, partnerships formed- especially school-to-business, and priorities asserted, including the foundational literacy that underlies STEM success. The tenor of the STEM conversation in South Central and across Iowa has been elevated thanks to the tour of co-chairs, now to leverage that energy.
- e. Item 1 concluded with Weld acknowledging the Service Providers working closely with managers to make this work, amidst wild variation in costs and capacities across programs, combined with the complicating factors of assessing, human subject-approving, contractually binding 900 LEAs to 12 providers in 6 regions of lowa.

Item 2: Pressing Recommendations of the Council - status

Consuming as Scale-Up is at this time, the Council continues to pursue recommendations of 7 Action Plan Working Groups. Of nineteen combined recommendations to emerge from 7 plans, six rose to "priority" status at August 14's Advisory Council meeting. Co-Chairs Lt. Gov. Reynolds and Pres. Allen are sounding out lowans on their tour as to urgency among the six recommendations, each of which is being moved forward cautiously, steadily. Weld briefed the Executive Committee, in-taking feedback.

a. <u>Coordinated STEM professional Development:</u> Committee members acknowledged the variable status of STEM PD across lowa, currently. It is lacking in consistency, capacity, coordination, expertise, and a guiding vision. Pockets of excellence, many of which were cited in conversation, exist. To scale excellence, to include virtual models, to cultivate leaders among our teachers, and to utilize tactics such as awards to generate awareness, were offered. Council leadership is scheduled to meet with AEA chiefs to consider this question in late September. This is a priority widely shared within and beyond the Council, members of whom believe that STEM may be just the vehicle for introducing to lowa statewide, standardized professional development. To revisit in October.

The web-needs of districts were observed to me murky in the eye of committee members. Mr. John Carver agreed to investigate a standard for schools, informed by the virtual technology assets pioneered in schools and colleges throughout lowa by Iowa Workforce Development.

b. <u>Public Awareness</u>. For the current year, a rapid deployment Public Service Announcement linking the activities of youth to her STEM college/career ready future is proposed, anchoring a statewide video contest of youth. Private investors are to be sought for P.A., including the possibility of a full suite of strategies developed by an agency in FY2014. To revisit in October.

c. STEM Focused Schools: Upon invitation of IBM, Council leadership will study the P-Tech school model in November, as well as the model created at GW Carver Academy in Des Moines and others, for possible replication of public-private partnering STEM-focused schools across Iowa. Web Portal for STEM: Exploratory meeting scheduled with Ia. Dept. of Ed. officials regarding utility of Equella for this purpose. STEM teacher recruitment: Model(s) other than Iowa —Teach Math & Science to be considered, while it was observed that Iowa's Department of Education plans for a teacher recruitment campaign that may serve our needs. STEM licensure and endorsement, oft-cited in community conversations, is to be taken up by the Council in collaboration with the BOEE. Business incentive to engage in STEM: advice being provided by leadership at the Iowa Economic Development Authority and Iowa Workforce Development.

Item 3: Budget draft FY 2014 - 1st Pass

Guidance from the Aug. 14 Advisory Council meeting shapes preliminary thinking on changes to the FY2014 budget from the current year (FY2013) budget. Notable changes are:

- a. A slight increase in support to Hub administration recognizing fiscal demand of cost-shared operations;
- b. A slight increase to the Council-supported share of Scale-Up, recognizing that non-state cost sharing will be add considerably to growth resources next year;
- c. A modest "innovation fund" to seed novel, experimental, and local STEM advancements;
- d. Position PLTW to more favorably compete for Scale-Up status funding stream (which may include, as contributed by an attendee, regionalization);
- e. As successful as is Iowa-Teach at priming the preparatory pipeline, candidates drop from traditional pathways at a nearly 50% rate, urging consider of alternate models for STEM teacher recruitment, preparation;
- f. Hire a grant coordinator to leverage the state's STEM investment through non-state funds.

The budget will undergo additional refinement based on today's input, for revisitation in October.

Closing Comments. Lt. Governor Reynolds and President Allen reiterated the importance of the work of this body, citing today's conversation as one of the more important in the young history of the initiative. Managers were especially acknowledged for their infusion of energy and expertise into translating the Council's vision into reality.

Adjournment. 11:00AM Next meeting, October 10, 9:00-11:00AM

Compiled by Jeff Weld and Kari Jastorff